

REMARKS

Entry of this Amendment in accordance with the provisions of 37 CFR § 1.114 is respectfully requested. With regard to this, it is noted that the present Amendment is being filed as a submission for a Request for Continued Examination (RCE) being filed herewith.

The present Amendment is in response to the final Office Action dated September 17, 2004. By the present Amendment, each of the independent claims 1, 10, 17 and 21 has been amended for clarification of the invention. The dependent claims have correspondingly been amended as well.

Briefly, the present invention is directed to a network architecture (and method) which includes a handover module implemented in either a first wireless network or a second wireless network to provide seamless mobility between the two wireless networks for a portable or cellular phone operable to access either of the first or second networks. The present invention can be used, for example, for a Wireless Intranet Office (WIO), with a wireless LAN (WLAN) and a GSM network. In particular, as discussed on page 4, in paragraph [0006], the present invention permits seamless mobility when a cellular phone roams between the first and second wireless networks in either an IDLE mode or ACTIVE mode while the cellular phone remains accessible to other devices without action by a user of the cellular phone.

This seamless mobility between the cellular phone (hereinafter Mobile Station MS) and the first and second network includes arrangements for location updates and measurement of neighboring cells. For example, when the two networks are a WLAN radio and a GSM network, during an IDLE mode when the Mobile Station roams from the GSM network to the WLAN, the Mobile Station selects the WLAN

radio and attempts a location update via the wireless LAN, and a new location of the Mobile Station is updated at a Mobile Switching Center. On the other hand, if the system is in an ACTIVE handover mode when the Mobile Station initiates a handover from the GSM network to the wireless LAN, the Mobile Station will measure the GSM neighbor cells and report a WLAN cell to an ordinary GSM cell, thereby enabling transmission of a handover request to a Mobile Switching Center of the GSM network until the Mobile Station is handed over to the wireless LAN. During an IDLE mode when the Mobile Station roams from the wireless LAN to the GSM network, on the other hand, the Wireless Mobile Center will inform the GSM neighbor cells, and the Mobile Station selects a GSM radio and attempts a location update via the GSM network, while the new location of the Mobile Station is updated at the Mobile Switching Center. If the system is in the ACTIVE handover mode when the Mobile Station initiates a handover from the wireless LAN to the GSM network, the Mobile Station measures GSM neighbor cells, and enables transmission of a handover request to the Mobile Switching Center via a Wireless Mobile Center of the wireless LAN until the Mobile Station is handed over to the GSM network. These features are expressed, for example, in dependent claims 2-5, as well as other claims.

Reconsideration and allowance of the independent claims 1, 10 and 21 over the cited primary reference to Harrison (USP 5,796,727) is respectfully requested. By the present Amendment, each of these independent claims has been amended to define the invention in means plus function terms of means for providing seamless mobility between the first and second wireless networks (claim 21) (which can be a local radio and a cellular network, as per claim 10, or a WLAN and a GSM network,

as per claim 1). More specifically, the claimed means provides the seamless mobility:

"in either IDLE mode or ACTIVE mode while the Mobile Station (MS) remains accessible to other devices without action by a user of said Mobile Station (MS)."

Harrison, on the other hand, completely fails to teach or suggest this claimed means. In the Office Action, general statements are made that the IDLE and ACTIVE modes are well known operational modes for a mobile cellular device. Although this may be true, the present amendment to the independent claims specifically defines the use of these two modes to establish seamless mobility while the Mobile Station remains accessible to other devices without user action. Absolutely nothing in Harrison teaches or suggests this claimed function. In particular, since the present claims define this function in terms of means plus function language under 35 U.S.C. § 112, sixth paragraph, full consideration of this language is required. Since these features are completely lacking from the primary reference to Harrison, reconsideration and allowance of the independent claims 1, 10 and 21 is respectfully requested.

Reconsideration and allowance of the independent method claim 17 over Harrison in view of Andersson (USP 6,230,017) and Ray (USP 6,424,638) is also respectfully requested. Method claim 17 defines specific operations during the IDLE and ACTIVE modes which are not at all taught or suggested in Harrison, whether considered alone or in combination with Andersson and Ray. These features include selecting a WLAN radio and requesting a location update at a Mobile Switching Center via a wireless LAN during an IDLE mode in the GSM network, in conjunction with alternatively selecting a GSM radio and requesting a location update at the

Mobile Switching Center via the GSM network in said wireless LAN. Claim 17 also defines, during an ACTIVE handover mode, measuring GSM neighboring cells to report a WLAN cell as an ordinary GSM cell, in conjunction with sending a handover request to the Mobile Switching Center of the GSM network, via a Base Station of the GSM network, until the handover is completed in the wireless LAN. Alternatively, the neighboring GSM cells can be measured and a handover request can be sent to the Mobile Switching Center via the Wireless Mobile Center of the wireless LAN, until the handover is completed in the GSM network. In conjunction with this, claim 17 has now been amended to specifically define:

"wherein said Mobile Station (MS) remains accessible to other devices without action by a users of said Mobile Station (MS)."

As such, it is respectfully submitted that nothing in Harrison teaches or suggests these detailed features, including the newly added terminology, regardless of whether or not considered with Andersson and Ray. Therefore, reconsideration and allowance of the independent claim 17 over these cited prior art is earnestly solicited.

Reconsideration and allowance of the dependent claims 2-9, 11, 13-16, 18-20 and 22-30 is also respectfully requested. These claims define various specific steps regarding, for example, the IDLE and ACTIVE mode and location updates associated therewith. In the Office Action, it is recognized that the primary reference to Harrison fails to teach or suggest a number of the limitations of the dependent claims. However, either official notice is taken that such steps are well known or other references are cited regarding these features. For example, on page 4 of the Office Action it is stated that:

"Given the fact that there are only so many modes for the phone to be in, i.e. Active, Idle, Sleep, system updates are inherently performed during non-sleep mode times, i.e. Active or Idle."

In response to these points of rejection, Applicants note that MPEP 2143.01 and 2144.03 require that the modification of cited prior art to meet claim limitations has to meet very specific standards. As noted in MPEP 2143.01:

"Obviousness can only be established by combining or modifying the teaching of the prior art to produce the claimed invention where there is some teaching, suggestion or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art."

As recognized in the Office Action, a number of the dependent claim features are simply not found in any of the cited references. As such, official notice has apparently been taken by the Examiner that these features would be well known to one of ordinary skill in the art. However, as noted in MPEP 2144.03, such "official notice"

"should only be taken by the Examiner where the facts asserted to be well known, or to be common knowledge in the art are capable of instant and unquestionable demonstration as being well know."

These standards have also clearly been stated in the case of In re Lee, 61 USPQ 2d 1430 (Fed. Cir. 2002) in terms of the statement:

"The factual question of motivation is material to patentability, and could not be resolved on subjective belief and unknown authority. It is improper, in determining whether a person of ordinary skill in the art would have been lead to this combination of references, simply to "use that which the inventor taught against its teacher."" 61 USPQ 2d at 1434.

Accordingly, it is respectfully submitted that the detailed features defined in the dependent claims clearly are not capable of "instant and unquestionable

demonstration as being well known." Quite to the contrary, it is respectfully submitted that the statements made in the Office Action concerning the obviousness of the dependent claim features (and the independent claim features, for that matter) fall within the prohibited category set forth in Lee of using "that which the inventor taught against its teacher."

In particular regard concerning this matter, it is noted that the dependent claims define not only a general use for system updates during active or idle modes, but, instead, very specific operations which are performed during the active or idle modes. Taking claim 2, as an example, the claim specifically defines that:

"during said IDLE mode when the Mobile Station (MS) roams from said GSM network to said wireless LAN, the Mobile Station (MS) selects a WLAN radio and attempts a location update via said wireless LAN, and a new location of the Mobile Station (MS) is updated at the Mobile Switching Center (MSC)."

In a similar matter, referring to claim 3 concerning the ACTIVE mode, it is stated:

"during said ACTIVE handover mode when the Mobile Station (MS) initiates a handover from said GSM network to said wireless LAN, the Mobile Station (MS) measures GSM neighbor cells and reports a WLAN cell as an ordinary GSM cell, enables transmission of a handover request to the Mobile Switching Center (MSC) of said GSM network, until the Mobile Station (MS) is handed over to said wireless LAN."

As such, these claims, as well as the other claims, define specific conditions under which operations occur (e.g., in claim 2, "during said IDLE mode when the Mobile Station (MS) roams from said GSM network to said wireless LAN") and the operations which occur during these specific conditions (again, referring to claim 2, the fact that the network architecture system "attempts a location update via said wireless LAN, and a new location of the Mobile Station (MS) is updated at the Mobile

Switching Center (MSC)." It is urged that such specific details defined in the claims are clearly not so well known as to be "capable of instant and unquestionable demonstration as being well known," as required by MPEP 2144.03. Therefore, it is respectfully submitted that the "official notice" taken throughout the Office Action concerning the features of both the independent and dependent claims does not meet the standards of MPEP 2144.03 for such official notice.

With regard to the modification of the primary reference to Harrison by the secondary references to Andersson and Ray to meet the terms of the independent and dependent claims, it is respectfully submitted that there is no motivation for this modification, outside of the Applicants' own teachings.

Again, taking claim 2 as an example, it is admitted in the Office Action on page 6 that the primary reference to Harrison is "silent on attempts a location update via said WLAN and a new location of the MS is updated at the MSC." However, reference is made to teachings of Andersson concerning first registration being updated for a particular Mobile Switching Center. Although Andersson may be of general interest concerning its teachings regarding updating, it is respectfully submitted that there is no teaching whatsoever of performing the specific operations (i.e., attempts a location update via said wireless LAN, and a new location of the Mobile Station (MS) is updated at the Mobile Switching Center (MSC)") under the specific condition called for in claim 2 (i.e. "during said IDLE mode when the Mobile Station (MS) roams from said GSM network to said wireless LAN"). Instead, the generalized teachings of Andersson concerning updates, which pertain to a significantly different situation, are combined in the Office Action with Harrison, without any particular motivation in either Harrison or Andersson to do so. It is

respectfully submitted that the present situation is not unlike that discussed by the CAFC in the case of In re Fine, 5 USPQ 2d (Fed. Cir. 1988) in stating:

"Because neither Warnick nor Eads, alone or in combination, suggests the claimed invention, the board erred in affirming the Examiner's conclusion that it would have been obvious to substitute the Warnick nitric oxide detector for the Eads sulfur dioxide detector in the Eads system... the Eads and Warnick references disclose, at most, that one skilled in the art might find it obvious to try the claimed invention. But whether a particular combination might be "obvious to try" is not a legitimate test of patentability... obviousness is tested by "what the combined teachings of the references would have suggested to those of ordinary skill in the art..." and "teachings of references can be combined only if there is some suggestion or incentive to do so." 5 USPQ 2D at 1599

As such, in light of the failure of either of the cited secondary references to Andersson or Ray to provide any such incentive for the modifications proposed in the Office Action of the Harrison reference, reconsideration and allowance of the dependent claims 2-9, 11, 13-16, 18-20 and 22-30 is respectfully requested.

If the Examiner believes that there are any other points which may be clarified or otherwise disposed of either by telephone discussion or by personal interview, the Examiner is invited to contact Applicants' undersigned attorney at the number indicated below.

To the extent necessary, Applicants petition for an extension of time under 37 CFR 1.136. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to the Antonelli, Terry, Stout & Kraus,


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LLP Deposit Account No. 01-2135 (Docket No. 0172.39340X00), and please credit any excess fees to such deposit account.

Respectfully submitted,

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